

## Production of leather

## Abstract

5

Leather is produced by a process comprising at least two of the following process steps A) to D):

- 10 A) use of one or more polyelectrolytes in the production of semifinished products or intermediate products, comprising the addition of one or more polyelectrolytes in at least one of the steps (a) to (d)

- 15 (a) together with from 0 to 1.5% by weight, based on the salted weight, of lime, immediately before or during liming,

- (b) before or during deliming,

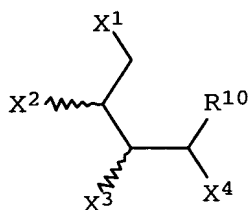
- 20 (c) before or during bating,

- (d) together with, altogether, from 0 to 3% by weight, based on the pelt weight, of alkali metal or alkaline earth metal salt, immediately before or during pickling;

25

- B) treatment of the hides during liming in an aqueous liquor with one or more compounds of the formula B.1

30



B.1

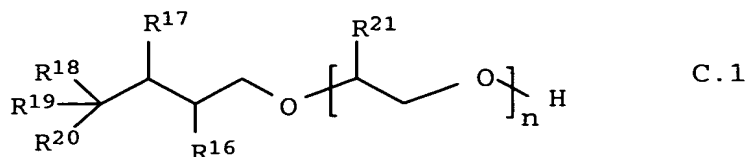
35

- or the corresponding alkali metal, alkaline earth metal, ammonium or phosphonium salts thereof, R<sup>10</sup> and X<sup>1</sup> to X<sup>4</sup> having the meanings stated in the description, with the proviso that
- 40 at least two mercapto groups are present in the compound or the compounds B.1;

- C) use of degreasing agents of the formula C.1

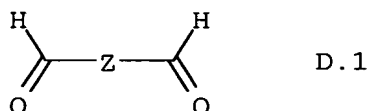
45

82

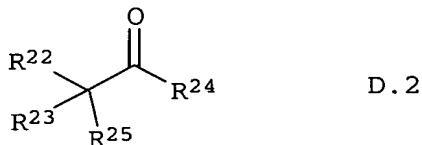


for degreasing pelts, hides or other intermediate stages and semifinished products in leather production, n and R<sup>16</sup> to R<sup>21</sup> having the meanings stated in the description;

- 10 D) tanning with the use of a tanning agent which can be prepared by reacting at least one aldehyde of the formula D.1,



with at least one further identical or different aldehyde of the formula D.1 in the presence of an acidic catalyst and optionally in the presence of at least one further carbonyl compound of the formula D.2



Z and R<sup>22</sup> to R<sup>25</sup> having the meanings stated in the description, with the proviso that, when Z corresponds to a single chemical bond or a radical without α-hydrogen atoms, at least one further aldehyde of the formula D.1, in which Z contains α-hydrogen atoms, or at least one further carbonyl compound of the formula D.2 is present.